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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,383	08/28/2001	Dana C. Bookbinder	SP01-243 / 9272-7	6010
20792	7590	02/25/2004	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627			HOFFMANN, JOHN M	
			ART UNIT	PAPER NUMBER

1731

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/941,383

Applicant(s)

BOOKBINDER ET AL.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 13-26, 29-37 and 44-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 27, 28 and 38-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2may2; 20nov2; 23Ja3.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

Applicant's election without traverse of Group I, Specie A in Paper No. 9 Feb 2004 is acknowledged.

Claims 13-26, 29-37 and 44-46 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. of 9 Feb 2004.

***Information Disclosure Statement***

It is noted that Examiner only considered the EPO abstracts (for References A-H through AT) submitted by Applicant in the paper dated 2 May 2002, and that the 1449 should not be construed differently.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5, line 4 refers to "the preform" and recites a relationship between it and other elements. However claim 1 seems to be written in a manner that suggests that

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Applicant does not want to have preform be part of the apparatus. Thus it is unclear if the preform is part of the apparatus.

Claim 28: it is unclear if the plurality of washers includes the washer of claim 27, or if the plurality is in addition to the washer of claim 27.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5-6, 11-12, 38, 41,42 are rejected under 35 U.S.C. 102(b) as being anticipated by the English abstract from the European Patent Office of each of the following Tatsuo JP 02074533 (reference AM), Tsutomu JP 62162636 (AH), and Ryoji JP 04280830 (AO).

Each clearly shows a furnace assembly with the furnace , the muffle, the heating device, process gas (which inherently requires a supply therefore) the handle, and the flow shield. The flow shield would inherently restrict flow in as much as Applicants does.

Claim 2 is met: a chamber is defined by the shield in as much as Applicant's invention does. To examiner, Applicant's figure 1 only shows that the shield defines only a bottom wall of a chamber. As opposed to Applicant's figure 7, which has a chamber 780 that is completely defined by the shield. Examiner is deferring to

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Applicant's determination that figure 1 (species A) does in fact has a shield which defines a chamber. An argument that these references do not have a shield which defines a chamber may be used as a basis for determining that claim 2 does not read on species A.

Claims 5-6, 38, 41, 42, and 11 are clearly met.

Claim 12 is clearly met. Furthermore, consolidation is a method of use limitation, it does not significantly limit the structure.

Claim 1, 3-4, 7-9, 27 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Taru EP 1069086.

Looking to figure 1 of Taru: tube 5' is butt-end connected to muffle 10: the lower end of 5 is at the same elevation as the lower end of 5'. See also, paragraphs [0035], and [0037]. Although Taru doesn't identify 5' as a muffle, one can consider it to be a muffle, or that the combination of 5' and 10 comprise a muffle. The rest of the limitations are clearly met.

Claim 3 is met - for at least some locations of the shield - wherein one can choose any one of the shields to be the shield of the claim.

Claim 4: see [0038]

Claim 7: the lower shields constitute a spacer for the upper shields

Claim 8: see [0038] - at 10mm, it would take only 5 shields to constitute 50 mm.

Figure 1 of Taru has 8 plates beneath the top shield.

Claim 9 see [0038]

Claim 27: 6 is the wall that extends to top of the furnace, therefore 6 is a top wall. The present specification does not identify any "top wall" nor is such defined or even mentioned. The top end defines an exit opening in which 9 is situated. 21 is the handle which extends through the opening. 9 is deemed to be the washer that covers a portion of the exit opening - for example, it covers a lower half of the opening. If 9 is 20 mm thick, one could say that the opening is 40 mm thick and thus the lower 20mm is covered by the washer. It is noted that a opening is nothingness, and the claim only indicates that the defined opening must be within the wall. There is no indication wall itself or any other structure defines or delimits the opening. Therefore, Taru need not have any structure which defines the opening.

Claim 43: col. 11, line8-10 refers to a set of plates figure 5A. The uppermost 14b is the top 14b plate. Any of the lower 14a plates is the solid flow restrictor. The rest of limitations are explicitly disclosed in [0043] and represented in the drawing.

Claims 1, 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Janssen 4477274.

Although figure 1 of Janssen is labeled 'prior art', the disclosure indicates the device of figure 2 is used with the figure 1 invention. Features 16 and 18 together comprise the muffle: examiner could find no definition of muffle (in the instant

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specification or the prior art) which would preclude such from being a muffle. 12 is the heating device. The ambient is the process gas supply (col. 1, lines 8-12): alternatively wherever the Janssen gas came from constitutes the gas supply. Feature 48 is the flow shield.

As to the handle: feature 26 is deemed be a handle - it can hold a preform by fusion bonding thereto. Applicant's claim 10 indicates that the handle can be made of silica. There is nothing which precludes the "handle" from also being a preform. It is noted claims are given their broadest reasonable interpretation. One reasonable interpretation is that the claim does not require a preform (note line 8). Any reasonable interpretation that requires a preform would be narrower in scope - thus would clearly not be the broadest reasonable interpretation.

Claim 27: 40 is a wall that is at the end of the muffle - therefore it is an end wall. 26 is the handle. 42 is a washer that covers the lower exit opening of the wall.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of the following Tatsuo JP 02074533 (reference AM), Tsutomu JP 62162636 (AH), and Ryoji JP 04280830 (AO).

Claims 3-4 relate to specific dimensions: it would have been obvious to make the apparatus as large or as small as desired and with as large or as small of tolerance as desired with no new or unexpected results.

Claims 39-40: at least Tatsuo discloses rotation and translation. It would have been obvious to use an machine to do the rotation and translation, because such would be more accurate and consistent than doing it by hand.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taru EP 1069086.

IT is not stated what the Taru rod 2 is made of. It is clear from [0038] that such materials would not contaminate the process: it would have been obvious to use any of the materials in [0038] as the material for the Taru rod 2, because they would not adversely effect the process.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Taru '592 is cited because it appears to have clearer drawings than the Taru which is used in the rejection. Kaiser, Yoon, Saito, Klop and Orita are



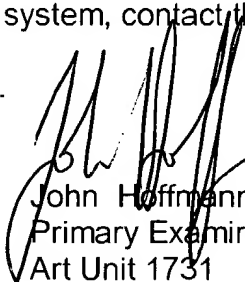
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cited as being related to the sealing of preform furnaces; Examiner has made no determination as to whether they teach Applicant's invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John Hoffmann  
Primary Examiner  
Art Unit 1731  
2-20-04

jmh